



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/027,488 | 12/20/2001 | Michael L. Needham | CM03852H | 9974 |
| 22917 | 7590 | 06/16/2005 | EXAMINER | |
| MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196 | | | TRAN, THIEN D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2665 | |

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/027,488 | NEEDHAM ET AL. | |
| | Examiner | Art Unit | |
| | Thien D. Tran | 2665 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 March 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/14972 in the view of Montgolfier (U.S Publication No. 2002/0004371 A1).

3. Regarding claim 1, WO 99/14972 discloses a method for a base site to facilitate third UMTS generation handoff comprising the steps of:

establishing a communication channel with the second base station (first outbound link), hereinafter first outbound link, for a dispatch call, figure 6;

broadcasting (transmitting) the dispatch call via the first outbound link to a plurality of mobile stations (MSs), page 1 lines 15-20;

determining a first MS of the plurality of MSs should begin a soft handoff via a communication channel with the second base station (second outbound link), hereinafter second outbound link, with an adjacent base site, page 1 lines 15-20; and

subsequent to the step of determining, indicating to at least one of the plurality of MSs in addition to the first MS the identity frequencies and adjacent cells (second outbound link and the identity of the adjacent base site), page 1 lines 15-20.

WO 99/14972 discloses that handoff method used for third generation of UMTS, page 2 lines 10-20. However, WO 99/14972 does not specifically disclose that the third generation of UMTS is CDMA performing soft handoff. Montgolfier discloses that the third generation of UMTS is CDMA performing soft handoff, paragraph 0002, and figure 1. Therefore, it would have been obvious to one having ordinary skill in the art to have the feature of CDMA-dispatch soft handoff used in WO 99/14972 since it was well known in the art that third generation of UMTS is CDMA performing soft handoff as described in Montgofier.

Regarding claim 10, WO 99/14972 discloses a method for a mobile station (MS) to perform a third UMTS generation handoff comprising the steps of:

receiving a dispatch call via a first outbound link with a base site, figure 8;
receiving an indication of the identity of a second outbound link with an adjacent base site on which the dispatch call can be received and the identity of the adjacent base site, page 7 lines 30-35; and

beginning a calculation pilot signals for handoff (beginning handoff) by simultaneously receiving the dispatch call via the first outbound link and the second outbound link without signaling the base site regarding the handoff, page 7 lines 15-25.

WO 99/14972 discloses that handoff method used for third generation of UMTS, page 2 lines 10-20. However, WO 99/14972 does not specifically disclose that the third generation of UMTS is CDMA performing soft handoff in which simultaneously receiving the dispatch call via the first outbound link and the second outbound link, paragraph 0005. Montgolfier discloses that the third generation of UMTS is CDMA performing soft

handoff in which simultaneously receiving the dispatch call via the first outbound link and the second outbound link, paragraph 0005, paragraph 0002, and figure 1.

Therefore, it would have been obvious to one having ordinary skill in the art to have the feature of CDMA-dispatch soft handoff used in WO 99/14972 since it was well known in the art that third generation of UMTS is CDMA performing soft handoff as described in Montgolfier.

Regarding claim 16, WO 99/14972 discloses a base site comprising:

a transmitter, page 7 line 16; and

a controller, figure 1, coupled to the transmitter, adapted to establish a first outbound link for a dispatch call, adapted to instruct the transmitter to transmit the dispatch call via the first outbound link to a plurality of mobile stations (MSs), page 1 lines 15-20, adapted to determining a first MS of the plurality of MSs should begin a handoff via a second outbound link with an adjacent base site, page 14 lines 5-20, and adapted to instruct the transmitter to transmit a signal, subsequent to determining, that indicates to at least one of the plurality of MSs in addition to the first MS the identity of the second outbound link and the identity of the adjacent base site, page 7 lines 31-36.

WO 99/14972 discloses that handoff method used for third generation of UMTS, page 2 lines 10-20. However, WO 99/14972 does not specifically disclose that the third generation of UMTS is CDMA performing soft handoff. Montgolfier discloses that the third generation of UMTS is CDMA performing soft handoff, paragraph 0002, and figure 1. Therefore, it would have been obvious to one having ordinary skill in the art to have the feature of CDMA-dispatch soft handoff used in WO 99/14972 since it was well

known in the art that third generation of UMTS is CDMA performing soft handoff as described in Montgofier.

Regarding claim 20, WO 99/14972 discloses a mobile station (MS) comprising:

a receiver, page 7 line 15; and

a processor, coupled to the receiver, adapted to instruct the receiver to receive a dispatch call via a first outbound link with a base site, figure 8, adapted to instruct the receiver to receive an indication of the identity of a second outbound link with an adjacent base site on which the dispatch call can be received and the identity of the adjacent base site, page 7 lines 30-35, and adapted to begin a calculation of pilot signals for handoff (handoff without signaling the base site) regarding the handoff by instructing the receiver to simultaneously receive the dispatch call via the first outbound link and the second outbound link, figure 8.

WO 99/14972 discloses that handoff method used for third generation of UMTS, page 2 lines 10-20. However, WO 99/14972 does not specifically disclose that the third generation of UMTS is CDMA performing soft handoff in which simultaneously receiving the dispatch call via the first outbound link and the second outbound link, paragraph 0005. Montgolfier discloses that the third generation of UMTS is CDMA performing soft handoff in which simultaneously receiving the dispatch call via the first outbound link and the second outbound link, paragraph 0005, paragraph 0002, and figure 1. Therefore, it would have been obvious to one having ordinary skill in the art to have the feature of CDMA-dispatch soft handoff used in WO 99/14972 since it was well known in

the art that third generation of UMTS is CDMA performing soft handoff as described in Montgolfier.

Regarding claim 2 WO 99/14972 discloses establishing an inbound link with the first MS for the dispatch call, figure 6.

Regarding claims 3, 15, 22 WO 99/14972 discloses the step of receiving a message 803 requesting to handoff from the first MS via the inbound link, page 14 lines 5-9, figure 8.

Regarding claims 4, 18, WO 99/14972 discloses the inbound link comprises a low-rate inbound link used to communicate at least one of forward power control information, soft hand-off information, and reverse power information, page 13 lines 25-27, page 5 lines 33-38.

Regarding claims 5, 19 WO 99/14972 discloses that the first outbound link and the second outbound link each comprises a full-rate CDMA outbound traffic channel, page 7 lines 15-20.

Regarding claims 6, 12, WO 99/14972 discloses the step of signaling in-band on the first outbound link the identity of the second outbound link and the identity of the adjacent base site, page 1 lines 15-20, page 7 lines 30-35.

Regarding claim 9, WO 99/14972 discloses the step of indicating the identity of the first MS with the identity of the second outbound link and the identity of the adjacent base site, figure 6.

Regarding claims 11, 21 WO 99/14972 discloses that the MS does not have an inbound link to the first base site established for the dispatch call when beginning the soft handoff, page 14 lines 10-14.

Regarding claim 17, WO 99/14972 discloses that the controller is further adapted to establish an inbound link with the first MS for the dispatch call and wherein the base site further comprises a receiver adapted to receive a request to handoff from the first MS via the inbound link, figure 8.

Regarding claims 7, 8, 13, 14 WO 99/14972 does not disclose broadcasting identities of channels and the adjacent base sites using paging channel. However, it would have been obvious to one having ordinary skill in the art to have identities of channels and the adjacent base sites using paging channel being broadcasted by the paging channel so that mobile stations receive information associated with the handoff procedure properly.

Response to Arguments

4. Applicant's arguments filed 03/28/2005 have been fully considered but they are not persuasive.

Applicant argues that WO 99/14972 does not teach determining a first MS of the plurality of MSs that should begin a soft handoff via a second outbound link with an adjacent base site. However, Examiner respectfully disagrees with the argument because WO 99/14972 teaches determining a first MS of the plurality of MSs that should begin a soft handoff via a second outbound link with an some base stations

(adjacent base site) based on the estimation of interference power measurements, col.12 lines 30-35. WO 99/14972 teaches handoff from which the MS simultaneously connects to several base stations during the handoff, page 1 lines 15-20 and page 11 lines 10-13, in the environment of third generation UMTS, col.2 lines 15-18 (type of soft handoff).

Applicant argues that WO 99/14972 does not teach determining a MS which should begin a soft handoff before indicating the identity of the second outbound link. However, Examiner respectfully disagrees with the argument because WO 99/14972 determining a MS which should begin a soft handoff before indicating the identity frequency of the second outbound link, page 1 lines 15-20.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2665

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (571) 272-3156. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

Patent Examiner

Thien Tran

DUCHO
PRIMARY EXAMINER

Suchita

6-10-05